The more you hope the more you know, the more you fear the less you know
Hope of success and anxiety as differentiators of academic skills in secondary school students

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Introduction
The main goal of the analysis presented was to find out whether levels of hope and levels of state and trait anxiety differentiate students' academic skill outcomes.

Method
The sample was selected in two stages. In the first stage 106 high schools, 54 technical high schools and 40 vocational schools were randomly selected from among all secondary schools in Poland. Then, within each school, one class was randomly selected for the study. A representative sample of students who began to attend secondary schools in Poland in 2009 (N = 3571, mean age 17.5, SD=0.5). The group study was performed in March and April 2010.

Participants
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Measures
Hope
The Adult Hope Scale (Snyder et al., 2000, quoted by Laguna, Trzebinski & Zieba, 2005) was used to measure the strength of respondents' expectations of positive effects of their own actions. The tool consists of 12 statements, scale from 1 = definitely false to 8 = definitely true.

State-Trait Anxiety
The State-Trait Anxiety Inventory (STAI) by Spielberger, Gorsuch, and Lushene (1970) in the Polish adaptation by Wrześniewski, Sosnowski, Jaworowska and Ferenc (2006) was used to measure anxiety. The test is split into a State-Anxiety scale and a Trait-Anxiety scale, each having 20 items (3-point: 1 = almost never, 2 = sometimes, 3 = often, Likert-type).

Academic Skills
A two-hour rotated test design included an extensive test on the major domain (in the current study; reading) and smaller subtests for two minor domains (mathematics, science). The dataset includes plausible value (PV) estimates for each of the above three subjects, standardized into a score with a mean of 500 and a standard deviation of 100. Polish adaptations of the PISA instrument were used to measure academic skills.

Academic skills
(PISA test, OECD (2009))

Reading literacy is defined as the ability to understand, use and reflect on written text to achieve their purposes

Mathematical literacy is concerned with the ability of students to analyze, reason, and communicate ideas effectively as they pose, formulate, solve, and interpret solutions to mathematical problems in a variety of situations.

Scientific literacy is defined as the ability to use scientific knowledge and processes not only to understand the natural world but to participate in decisions that affect it.

Conclusions
• Students from the group with a high level of hope achieved higher scores in all three domains of PISA assessment, then students from the group characterized by a low level of hope.
• Clear differences in the scores of all three academic skills where found in comparisons by low and high levels of trait and state anxiety: students from the group with low levels of trait and state anxiety achieved higher scores in all three domains of the PISA assessment, than students from the group characterized by higher levels of anxiety.
• Hope and Anxiety (understood as a trait and state) are important variables in the context of academic performance. We should aim for less anxiety and more hope at schools to help pupils to develop their academic skills.

References

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